INTERACTIONS BETWEEN TRADE POLICIES AND GM FOOD REGULATIONS

Kym Anderson
World Bank, University of Adelaide, and Centre for Economic Policy Research

Abstract: Agricultural biotechnologies, and especially transgenic crops, have the potential to offer higher incomes to biotech firms and farmers, and lower-priced and better quality food for consumers. However, the welfare effects of adoption of genetically modified (GM) food and feed crop varieties are being affected not only by some countries’ strict regulations governing GM food production and consumption, but also by their choice of food trade policy instruments. Specifically, notwithstanding the ending of the European Union’s GM moratorium in April 2004, the continuing use by the EU of strict labeling and liability laws and of variable trade taxes-cum-subsidies and tariff rate quotas is reducing the aggregate gains from new biotechnologies and the incentive for EU taxpayers and for life science companies to support GM food research. The use of variable levies and prohibitive out-of-quota MFN tariffs in particular is yet another reason to push for an ambitious outcome from the WTO’s Doha Round of agricultural trade negotiations.

Key words: agricultural biotechnology, trade policy, regulation of GM foods

1. INTRODUCTION

There is a small but rich literature on the consequences of market distortions for the aggregate size and distribution of the benefits (positive and negative) from agricultural R&D. A neat synopsis of the key analyses and conclusions can be found in Alston and Pardey (1996, pp. 184–198). A consensus in that literature is that the aggregate size of the benefits is likely to be far less af-
fected by price-distorting policies than is their distribution. While this certainly is the case if distortion rates are not altered when new farm technologies appear, it turns out to be less so if those rates are endogenous to technological change at home or to terms of trade changes following adoption of new technology abroad. And despite the efforts of the Uruguay Round’s agricultural and sanitary and phytosanitary agreements to discipline agricultural protection, much scope evidently remains for World Trade Organization (WTO) members to vary their price distortions. With respect to products that may contain genetically modified organisms (GMOs), one way this is being done is to limit imports produced with the new biotechnology (via bans or strict labeling regulations), on the grounds that they may harm the environment or be a risk to human health. Another is by having support measures that vary import tariff/export subsidy rates (or the extent of direct domestic producer price support) so as to maintain a constant domestic price in the wake of new technology being adopted abroad or at home.

The emergence in the 1990s of transgenic crop varieties initially offered hope that the private sector might boost public funding of agricultural research. But concerns soon arose to dampen that optimism. A key one was that Europeans and others would reject the technology on environmental and food safety grounds, thereby thwarting export market prospects for adopters of the transgenic crops. That concern was vindicated when the European Union imposed in 1998 a de facto moratorium on the production and importation of food products that may contain GMOs. As a result, widespread adoption of new food crop varieties from the fledgling “gene revolution” has been limited to date to just three products (maize, soybean, and canola) in three countries: Argentina, Canada, and the United States (James 2004).

True, the European Union (EU) replaced its moratorium on May 1, 2004, with new legislation, but it involves strict GM labeling regulations and liability laws that demand the implementation of expensive segregation and identity preservation systems that—especially for developing countries—may be as restrictive of exports of GM products as was the moratorium. With a number of other countries also imposing strict labeling regulations on GM foods and no harmonization of those standards (Carter and Gruère 2006), biotech firms are increasingly diverting their R&D investments away from food. Many public agricultural research systems also have remained shy about investing heavily in this technology, including the CGIAR’s international agricultural research centers, which depend largely on rich-country grants. The legality of the EU’s restrictions on imports of GM products has begun to be tested by the WTO’s Dispute Settlement Body, but the issue will take years to resolve (Anderson and Jackson 2005c).

Varying import taxes/export subsidies/domestic price supports is legally possible under WTO law for any member while ever its applied tariff or producer or export subsidy is below the member’s bound commitment for